

PHARMACOGENOMIC TESTING FOR

SIMVASTATIN

What is pharmacogenomic testing?

Pharmacogenomic testing looks at changes in your genetic code, called polymorphisms, that can affect how you respond to certain medications. Some genetic changes may make it more likely to have side effects from a medication, while other genetic changes may make it less likely that the medication will help treat your symptoms. Knowing whether or not you carry these genetic changes can help your healthcare provider select the medication and/or dose that will work best for you.

Pharmacogenomic testing may not be accurate for people who have received some types of transplants. Talk to your healthcare provider if you are a transplant recipient.



How do genetics affect my response to simvastatin?

Like many medications, simvastatin is processed in your body to get rid of it. This happens with the help of a special protein called SLCO1B1. Your body's instructions for making this special protein are located in your DNA. Variations in these instructions can affect how much

working SLCO1B1 protein your body makes.

People with lower amounts of working SLCO1B1 will process medications more slowly. Given the same dose of simvastatin as a person with "normal" amount of working SLCO1B1 protein, they will have more of the drug in their body. These individuals may be at greater risk of experiencing muscle pain (myopathy) from taking simvastatin.

What can pharmacogenomic testing for simvastatin tell me?

Simvastatin is a medication used to decrease the amount of bad cholesterol in your body. Knowing how much working SLCO1B1 your body makes can help your healthcare providers select the most appropriate medication for your condition.

It is important to know that pharmacogenomic testing can influence decisions about which medication may work better for you, but it is not the only factor. Other things that can affect how you respond to a medication include your age, sex, the symptoms of your condition, other medications or supplements you are taking, any other health conditions you have (for example, liver or kidney problems)—and possibly other changes to your genetic code that have not been discovered yet.

What can't this pharmacogenomic test tell me?

- This pharmacogenomic test cannot tell you how your family members might respond to this medication.
- This pharmacogenomic test cannot tell you about your diagnosis.
- This pharmacogenomic test cannot tell you about your risk for diseases.

What should I do after I receive my test results?

Talk to your doctor or pharmacist about your results to determine whether any changes should be made to your medications. Ask them:

- What do these results mean?
- How will these results affect how I take my medication?
- Do these results affect any other medications I am taking?

DO NOT START, STOP, OR CHANGE DOSES OF YOUR MEDICATIONS WITHOUT CONSULTING YOUR HEALTHCARE PROVIDER.